



A.D. 1875, 11th SEPTEMBER. N° 3187.

Galvanic Shield for the Chest and Lungs, &c.

(This Invention received Provisional Protection only.)

PROVISIONAL SPECIFICATION left by Joseph Rogers at the Office of the Commissioners of Patents, with his Petition, on the 11th September 1875.

I, JOSEPH ROGERS, of Owens Row, Goswell Road, in the County of
5 Middlesex, Electrician, do hereby declare the nature of the said Invention for "A NEW OR IMPROVED GALVANIC SHIELD OR PROTECTOR FOR IMPARTING ELECTRICITY TO THE CHEST AND LUNGS AND OTHER PARTS OF THE HUMAN BODY," to be as follows:—

This Invention relates to a novel construction of electrical protectors
10 applicable to various parts of the human body to which it may be necessary to communicate electrical currents.

I form a series of batteries composed of copper and zinc as follows:—
I take a small plate of the metal and bend it double, leaving a narrow space within, and I press the edges together and solder the same,
15 leaving a small opening for the insertion of a suitable exciting acid or salt, or other electrical excitant compound, and I then hermetically close the aperture, thus forming a cell. These cells may be respectively of copper or of zinc, and are to be connected by short lengths of chain

Rogers' Improved Galvanic Shield for the Chest and Lungs, &c.

or wire to each other, but by the intervention of a simple plate of copper or zinc, so that a copper cell may be connected to a zinc plate, and vice versâ; or I make the entire series in the cellular form excited as described. Or in some cases I place the copper cell on the surface of a zinc plate with the intervention of a piece of fabric, and I secure the two by means of an eyelet rivet; or I place a zinc cell on a copper plate. These may form separate batteries, but in some cases I connect the entire series throughout my protector by means of chains or wires exactly on the principle of a galvanic battery. And I also propose to insulate the positive and negative elements by the intervention of gutta percha or other insulating compound to assist the process. 5 10

In order to apply these batteries to the human body I employ suitable fabrics, such as flannel or felt, wash leather, cotton, wool, or silk, and I form receptacles or pockets in the interior lining or body of the protector, and then apply my galvanic series in any positions and number required with their connections, after which I complete the article by external and internal layers of fabric, when by straps or bands the protector may be adjusted to the chest or back, or both, or to any desired part of the body to be treated. 15

In the chest and back protector I propose to employ an independent battery or plate for the purpose of obtaining a positive current directly through the body. 20

In lieu of copper and zinc I use platinum, platinized lead, silver, or other well known metals or combinations of batteries, capable of concentration in a small compass, the principle of my Invention being the same. 25

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